

ABSTRACT

The present invention is directed to pharmaceutical compositions of effective amounts of NMDA receptor antagonists and non-neurotoxic compounds having preservative activity for the administration to a patient in need of effective analgesia and anesthesia. The compositions of the invention advantageously do not cause any significant neurotoxicity. The preferred NMDA receptor antagonist is ketamine. The non-neurotoxic compound is selected from one of the following groups including organic acids, esters thereof, and salts thereof; alcohols, polyols, and phenols; alkyl parabens; cresols; benzalkonium chloride quaternary ammonium salts; chlorhexidine, imidurea, alpha tocopherol, and EDTA. Preferably, the nonneurotoxic compound is benzalkonium chloride, benzyl alcohol or phenol.